



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

SEP 15 2017

REPLY TO THE ATTENTION OF:

WQ-16J

Peter Fasbender, Field Supervisor
Twin Cities Ecological Services Field Office
4101 E. 80th Street
Bloomington, Minnesota 55425-1665

Dear Mr. Fasbender:

On May 9, 2017, the U.S. Environmental Protection Agency received the water quality standards (WQS) triennial review submission from the Grand Portage Band of the Minnesota Chippewa Tribe (hereinafter, the Tribe). The Tribe has requested EPA approval of the ammonia criteria, narrative nutrient criteria and narrative biological criteria contained within the triennial review submission. Because EPA has determined that approval of the Tribe's narrative biological and nutrient criteria will have no effect on the northern long-eared bat, the only item requiring FWS informal consultation is the ammonia criteria for the protection of aquatic life.

EPA is approving the Tribe's ammonia criteria subject to completion of consultation under section 7 of the Endangered Species Act (ESA). The ammonia criteria equations and values included within the Tribe's submission are scientifically defensible, protective of designated uses, consistent with EPA Clean Water Act Section 304(a) recommendations, as well as the applicable regulations at 40 CFR 131.11 and 40 CFR 132.4(g)(1).

As documented in the enclosed biological evaluation, EPA has determined that approval of the Tribe's ammonia criteria may affect, but is not likely to adversely affect the northern long-eared bat (*Myotis septentrionalis*). Consistent with the requirements of section 7 of the ESA, we request your review of the enclosed biological evaluation. If you agree that EPA's action may affect, but is not likely to adversely affect the northern long-eared bat, please provide your written concurrence at your earliest convenience.

If you have any questions or require more information to conclude informal consultation on this matter, please contact myself or Kathleen Mayo of my staff at (312) 353-5592 or mayo.kathleen@epa.gov.

Sincerely,

A handwritten signature in dark ink, appearing to read "David Pfeifer", with a long horizontal flourish extending to the right.

David Pfeifer, Acting Chief
Water Quality Branch

Enclosure

Biological Evaluation Grand Portage Reservation Triennial Review

DATE:

I. Description of Federal Action

Under section 303 of the Clean Water Act (CWA), states and tribes are required to submit adopted revisions to water quality standards (WQS) to the U.S. Environmental Protection Agency for review and approval. Section 7(a)(2) of the Endangered Species Act (ESA) requires EPA, in consultation with the U.S. Fish and Wildlife Service (FWS), to ensure that any action authorized, funded, or carried out by the agency is not likely to jeopardize the continued existence of any endangered or threatened species or adversely impact habitat for such species. As provided in the EPA-FWS Memorandum of Agreement regarding enhanced coordination of CWA and ESA actions, a biological evaluation (BE) is the appropriate analysis to determine whether an adopted WQS revision is likely to adversely affect federally-listed species (U.S. Environmental Protection Agency et al. 2001).

The Grand Portage Band of the Minnesota Chippewa Tribe (hereinafter, the Tribe) has completed its required review of the Tribe's EPA-approved WQS program consistent with Section 303(c)(1) of the CWA which requires that states/tribes hold public hearings for reviewing applicable WQS and, as appropriate, updating standards at least every three years (i.e. "triennial review"). The objective of this requirement is to ensure that state/tribe WQSs reflect current science and public policy. The Tribe has decided to update existing biological criteria, and add new criteria for ammonia and nutrients. EPA received the Tribe's triennial review submittal and request for approval on May 9, 2017.

II. Action Area

The Grand Portage Reservation lies in the extreme northeastern tip of Cook County, Minnesota, at the border with Canada, and is located entirely within the Great Lakes Basin. The Reservation consists of 56,000 contiguous acres within the exterior boundaries. The Canadian province of Ontario provides the Reservation's northern boundary. The western boundary is State and Federal forest. Lake Superior forms the rocky, wave-swept boundary on the south and east.

The Grand Portage Tribal Environmental Agreement with EPA describes the water resources as follows: "About 42 miles of perennial and 55 miles of intermittent streams flow through the Reservation. These streams and tributaries drain into Lake Superior and generally flow along steeply graded channels incised in bedrock. The Pigeon and Reservation Rivers flow along the northern and western boundaries, respectively. The Pigeon River Basin has a total drainage area of about 600 square miles (more than half of this area is in Canada) and encompasses the northern one-third of the Reservation. There are seventeen inland lakes that collectively comprise approximately 816 acres and about 7,204 acres of wetlands within the Reservation boundaries."

Northern long-eared bats are insectivores that use a combination of aerial and gleaning foraging techniques to capture prey (Baron et al. 1999). The northern long-eared bat occasionally forages along riparian areas, but more commonly forages within forested hillsides or ridges between the understory and the canopy (one to three meters off the ground) (Brack and Whitaker 2001; Lee and McCracken 2004). Studies indicate that the northern long-eared bat feeds primarily on flying insects (Brack and Whitaker 2001), with Lepidopterans (moths) and Coleopterans (beetles) consistently making up 45% or more of their diet (Feldhammer et al. 2009; Lee and McCracken 2004; Whitaker 2004). In addition to beetles and moths, the northern long-eared bat also feeds on a diverse range of other invertebrates, such as Dipterans (flies), Trichopterans (caddisflies) and spiders. The relative contribution of these prey items to the bat's diet varies by location. The studies indicate that aquatic insects such as flies and caddisflies may be a significant part of the northern long-eared bat's diet in some local populations but terrestrial insects are an overall more important food source to the bat.

The FWS final rule listing the northern long-eared bat as a threatened species was published in the Federal Register (FR) at 81 FR 1900 on January 14, 2016 with an effective date of February 16, 2016. The northern long-eared bat is listed as a threatened species largely due to the effects of White Nose Syndrome, a disease caused by the fungus *Pseudogymnoascus destructans*. This disease has already decreased the Northeastern population by 99 percent and is expected to spread west across the United States. Other threats to the species include wind turbines, adverse impacts to hibernacula, and loss or degradation of summer habitat (USFWS 2015).

IV. Analysis of Action's Potential to Affect Aquatic-dependent Endangered and Threatened Species or Critical Habitat

EPA intends to approve the Tribe's triennial review updates of the narrative biological and nutrient criteria as well as the newly adopted ammonia criteria equations (see Appendix A). Because EPA has determined that approval of the Tribe's narrative biological and nutrient criteria will have no effect on the northern long-eared bat, the only item requiring FWS informal consultation is the ammonia criteria for the protection of aquatic life. EPA has determined that approval of the ammonia criteria may be beneficial; therefore, the "may affect, but is not likely to adversely affect" determination is appropriate for impacts to the northern long-eared bat. This section includes an examination of both the direct effects of EPA's action as well as its indirect effects, which are defined in the regulations at 50 C.F.R. §402.02 as "those effects that are caused by or will result from the proposed action and are later in time, but are still reasonably certain to occur." Consultation with FWS is appropriate even if the effects of the action are entirely beneficial or unknown as EPA has determined below:

- The Tribe adopted ammonia criteria consistent with EPA's updated 2013 ammonia criteria recommendations. The criteria are scientifically defensible and intended for the protection of aquatic life, not terrestrial wildlife such as the northern long-eared bat. There will be no direct effects to the northern long-eared bat because of lack of direct exposure to in-stream ammonia concentrations.
- There may be potential beneficial indirect impacts to the northern long-eared bat due to impacts on the aquatic-dependent prey items of the bat (i.e., the ammonia criteria that the

VI. Literature Cited

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- Brack Jr., V. and J.O. Whitaker. 2001. Foods of the northern myotis, *Myotis septentrionalis*, from Missouri and Indiana, with notes on foraging. *Acta chiropterologica* 3(2): 203-210.
- U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and National Oceanic and Atmospheric Administration. 2001. Memorandum of agreement between the Environmental Protection Agency, Fish and Wildlife Service and National Marine Fisheries Service regarding enhanced coordination under the Clean Water Act and Endangered Species Act. Federal Register 66:11202-11217.
- U.S. Environmental Protection Agency. 2013. Aquatic Life Ambient Water Quality Criteria for Ammonia – Freshwater 2013. United States Environmental Protection Agency. Office of Water 4304T. EPA 822-R-13-001. April 2013.
- Feldhammer, G.A., T.C. Carter, and J.O. Whitaker, Jr. 2009. Prey consumed by eight species of insectivorous bats from southern Illinois. *American Midland Naturalist* 162(1): 43-51.
- Lee, Y. and G.F. McCracken. 2004. Flight activity and food habits of three species of *Myotis* bats (Chiroptera: Vespertilionidae) in sympatry. *Zoological Studies* 43(3): 589-597.
- U.S. Fish and Wildlife Service. 2015. Northern Long-Eared Bat Fact Sheet. <http://www.fws.gov/midwest/endangered/mammals/nleb/nlebFactSheet.html>
- Whitaker, Jr., J.O. 2004. Prey selection in a temperate zone insectivorous bat community. *Journal of Mammalogy* 85(3): 460-469.